



Instrumentation and Methodologies Development of Magnetic Resonance

Guest Editor:

Dr. Raanan Carmieli

Weizmann Institute of Science
Israel, Rehovot Area, Israel

Deadline for manuscript
submissions:

closed (31 December 2021)

Message from the Guest Editor

Dear Colleagues,

Magnetic resonance (MR) spectroscopy is a powerful tool with applications ranging from physics, chemistry, medicine, and industry, by providing precise structural information at the atomic level. Recent advances in MR spectroscopy have allowed us to move from the study of small molecules to that of biomacromolecules and material device characterization. The introduction of dynamic nuclear polarization (DNP) has tremendously increased the MR signal and made previously impractical experiments a reality.

The incorporation of arbitrary wave function generators (AWG) in EPR spectroscopy has made a great contribution to quantum information science, for example, demonstrating for the first time quantum spin teleportation in a molecular system tailored by chemical synthesis.

In this Special Issue, we invite submissions dedicated to new advances in methodology, instrumentation, and applications of magnetic resonance (MR) to the study of biology, materials and devices, quantum information science, medicine, drug development, and industrial application as well. Survey papers and reviews are also welcomed.

Dr. Raanan Carmieli
Guest Editor

Special Issue





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

Contact Us

Applied Sciences Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/applsci
applsci@mdpi.com
[X@Applsci](https://twitter.com/Applsci)